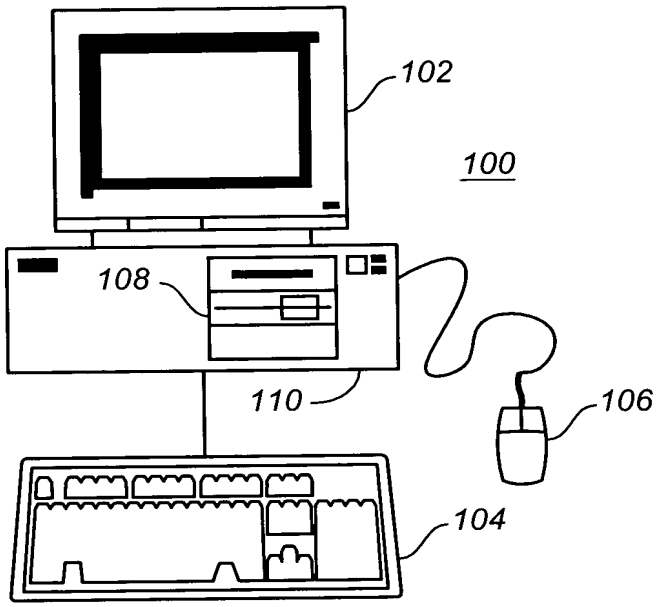
102
100
108
110
106
104

FIG._1

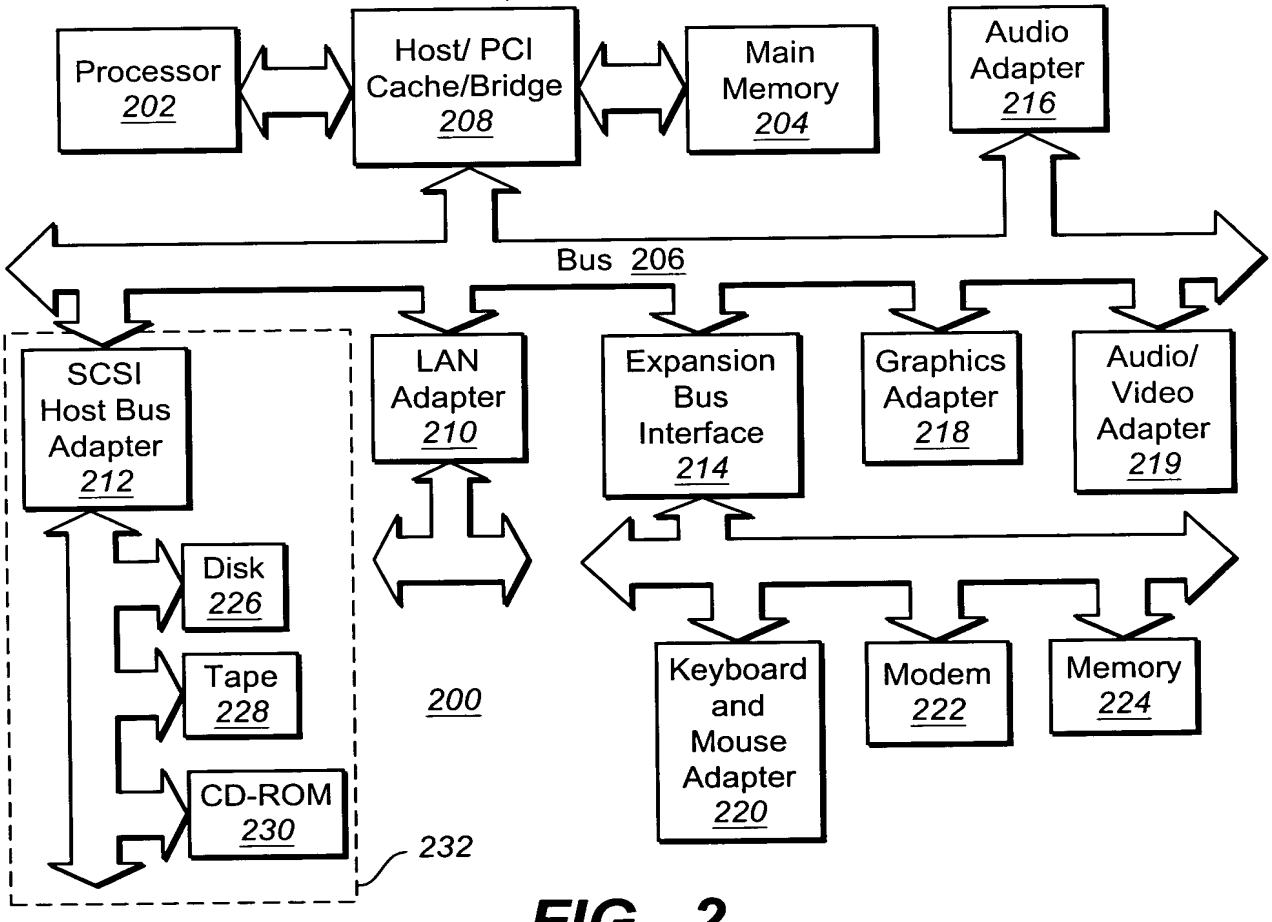
Processor
202
Host/ PCI
Cache/Bridge
208
Main
Memory
204
Audio
Adapter
216
Bus 206
SCSI
Host Bus
Adapter
212
LAN
Adapter
210
Expansion
Bus
Interface
214
Graphics
Adapter
218
Audio/
Video
Adapter
219
Disk
226
Tape
228
CD-ROM
230
200
232
Keyboard
and
Mouse
Adapter
220
Modem
222
Memory
224

FIG._2

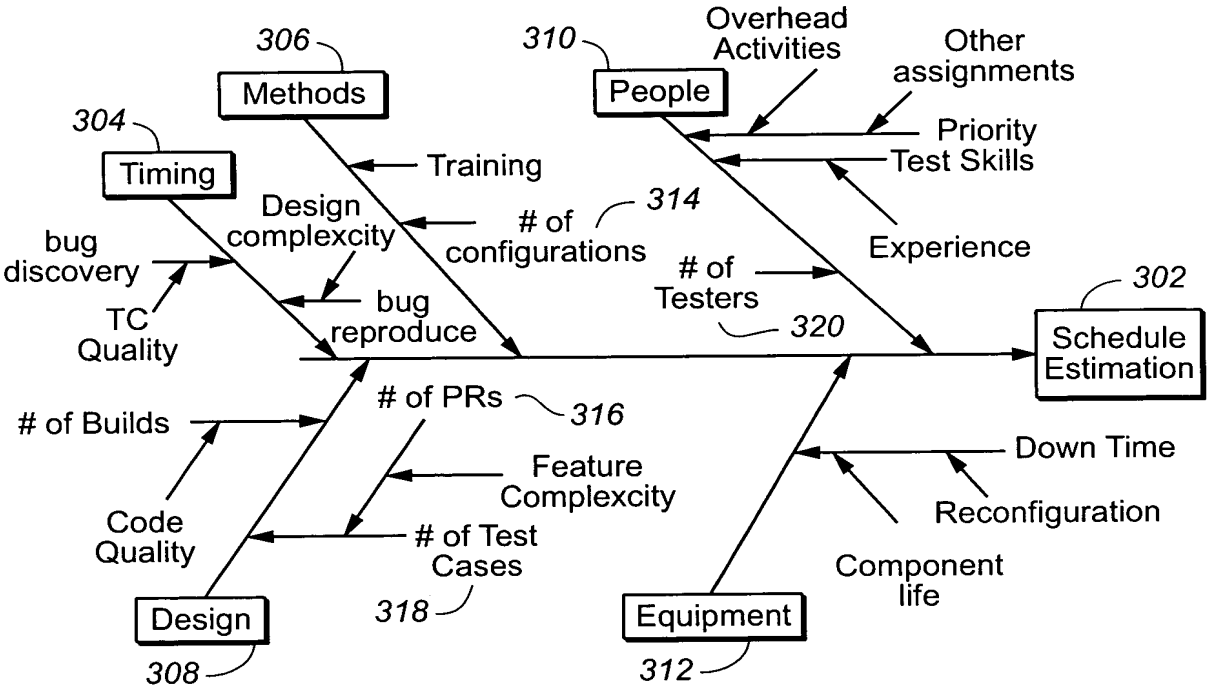
306
Methods
310
People
Overhead Activities
Other assignments
304
Timing
Training
Priority
Test Skills
Design complexcity
# of configurations
314
Experience
bug discovery
bug reproduce
# of Testers
302
TC Quality
320
Schedule Estimation
# of Builds
# of PRs
316
Down Time
Feature Complexcity
Code Quality
# of Test Cases
Reconfiguration
Component life
318
Design
Equipment
308
312

FIG._3

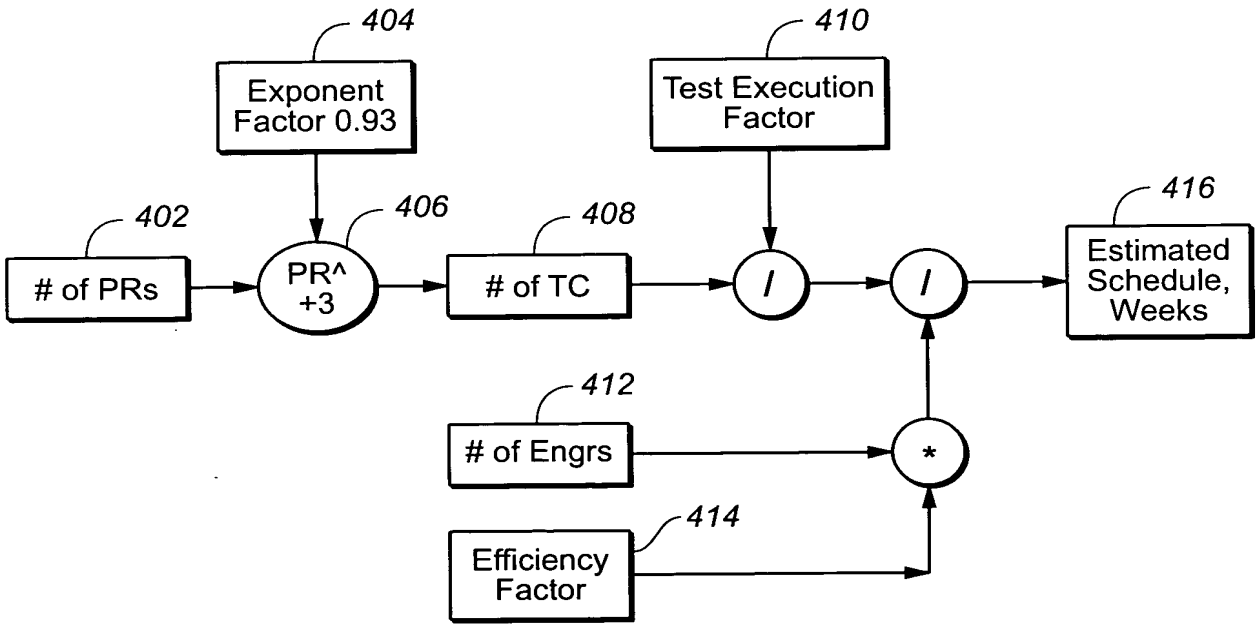
404
Exponent Factor 0.93
410
Test Execution Factor
416
402
406
408
# of PRs
PR^ +3
# of TC
/
/
Estimated Schedule, Weeks
412
# of Engrs
*
414
Efficiency Factor

FIG._4

	SYMsm 7/4.x/8/5.x	Unique TC (506)	TC/Eng (508)	FTE Eng (510)	test wks (Calendar) (512)	Eng wks (Calendar) (514)	test cases/ Cal-Wk	test cases/ tester-wk (502)
							Test Execution Factors	
G1	Overall Viking 1	199	22	9	29	32.22	0.76	0.69
G1	Overall Viking 2	188	19	10	27	33.08	0.7	0.57
G2	Overall Viking 3	421	38	11	24	30	1.59	1.28
G1	Overall Mojave 1-Tier 1	190	16	12	23	28.27	0.69	0.56
G2	Overall Sonoran 1 (8.0/5.0)	194	24	8	12.2	15.25	1.99	1.59
G3	Overall Mojave 2-Solaris 8/W2K	119	40	3	7.58	8.21	**5.23**	**4.83**
G3	Sonoran 1M Regression (120 PRs)	83	46	1.8	10	11.11	**4.61**	**4.15**

504

FIG._5

Schedule in Weeks

PRs	Aggressive	70% Confidence	High Confidence
1	0.42	0.51	0.62
2	0.52	0.62	0.76
3	0.61	0.73	0.90
4	0.70	0.84	1.03
5	0.79	0.95	1.16
10	1.22	1.46	1.78
15	1.64	1.96	2.39
20	2.04	2.44	2.98
25	2.44	2.92	3.56
30	2.83	3.38	4.13
35	3.22	3.85	4.69
40	3.60	4.31	5.25
45	3.98	4.76	5.81
50	4.36	5.21	6.36
55	4.73	5.66	6.90
60	5.10	6.10	7.44
65	5.47	6.55	7.98
70	5.84	6.99	8.52
75	6.21	7.42	9.05
80	6.57	7.86	9.59
85	6.93	8.29	10.11
90	7.30	8.72	10.64
95	7.66	9.16	11.17
100	8.01	9.58	11.69
105	8.37	10.01	12.21
110	8.73	10.44	12.73
115	9.08	10.86	13.25
120	9.44	11.28	13.76
125	**9.79**	**11.71**	**14.28**

FIG._6

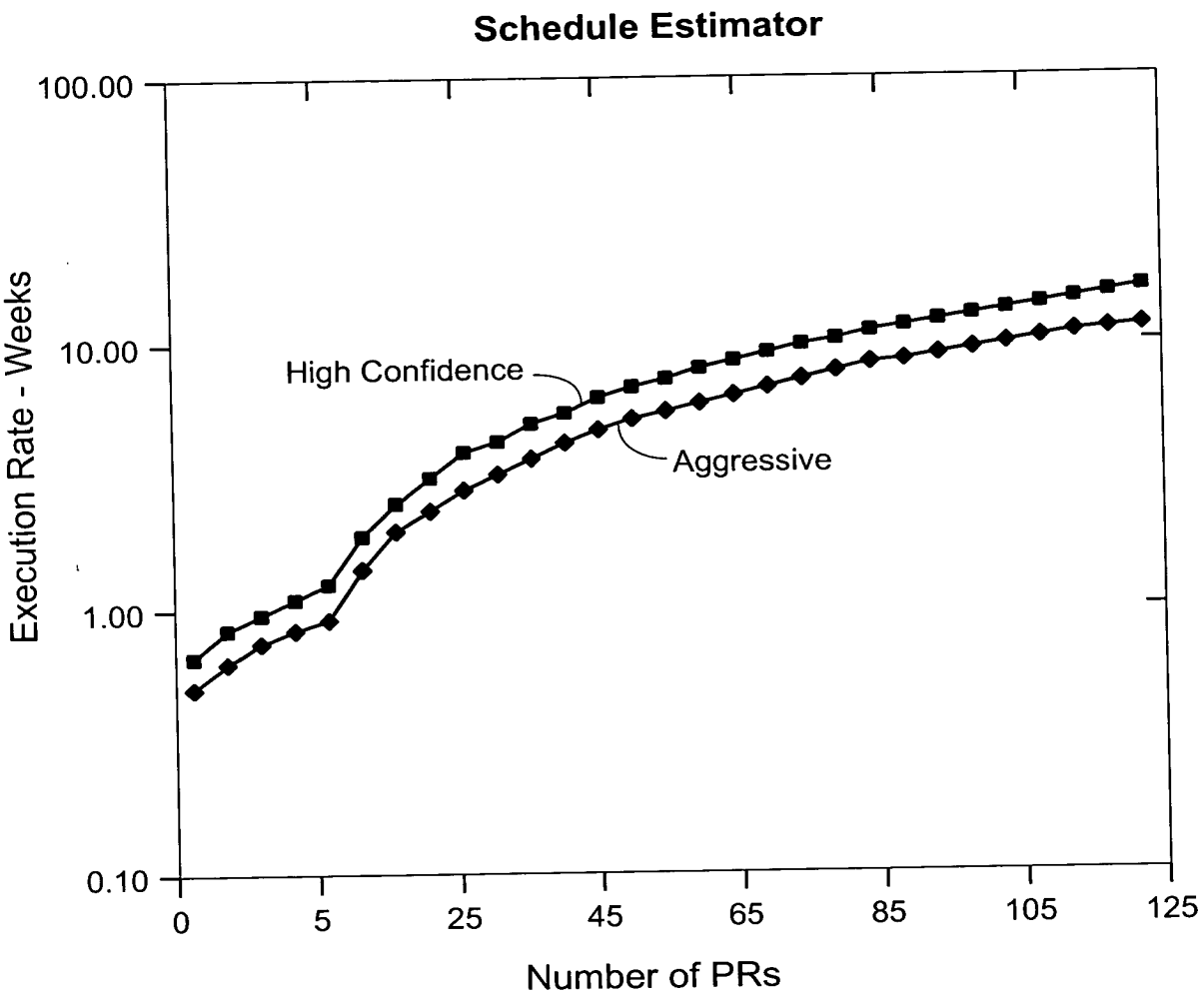
Schedule Estimator
100.00
10.00
1.00
0.10
Execution Rate - Weeks
High Confidence
Aggressive
0
5
25
45
65
85
105
125
Number of PRs

FIG._7